```
> fil reg; d que l3
ILE 'REGISTRY' ENTERED AT 11:06:37 ON 22 DEC 2003
SE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
LEASE SEE "HELP USAGETERMS" FOR DETAILS.
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roperty values tagged with IC are from the ZIC/VINITI data file
rovided by InfoChem.

TRUCTURE FILE UPDATES:   21 DEC 2003  HIGHEST RN 629597-20-2
ICTIONARY FILE UPDATES:  21 DEC 2003  HIGHEST RN 629597-20-2

SCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

rossover limits have been increased.  See HELP CROSSOVER for details.

xperimental and calculated property data are now available. For more
nformation enter HELP PROP at an arrow prompt in the file or refer
o the file summary sheet on the web at:
ttp://www.cas.org/ONLINE/DBSS/registryss.html

L2          2626 SEA FILE=REGISTRY ABB=ON  CAAGGUAUGUUGCCCGUUUGU|ACAAACGGGCAACAU
                 ACCUUG|UGGCUCAGUUUACUAGUGCCAUU|AAUGCACUAGUAAACUGAGCCA/SQSN
L3            55 SEA FILE=REGISTRY ABB=ON  L2 AND SQL<100

d rn ssn kwic nte ic 1-55

L3   ANSWER 1 OF 55  REGISTRY  COPYRIGHT 2003 ACS on STN
RN   580166-36-5  REGISTRY
CN   GenBank AR362588 (9CI)  (CA INDEX NAME)
SQL  47

SEQ      1 ggcctcagtc cgtttctctt ggctcagttt actagtgcca tttgttc
                   = ========== ========== ==

HITS AT:   20-42

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
LC   STN Files:   GENBANK

L3   ANSWER 2 OF 55  REGISTRY  COPYRIGHT 2003 ACS on STN
RN   580166-33-2  REGISTRY
CN   GenBank AR362585 (9CI)  (CA INDEX NAME)
SQL  47

SEQ      1 ggcctcagtc cgtttctctt ggctcagttt actagtgcca tttgttc
                   = ========== ========== ==

HITS AT:   20-42

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
LC   STN Files:   GENBANK

L3   ANSWER 3 OF 55  REGISTRY  COPYRIGHT 2003 ACS on STN
RN   570256-21-2  REGISTRY
CN   GenBank AR352039 (9CI)  (CA INDEX NAME)
SQL  25

SEQ      1 gaggacaaac gggcaacata ccttg
         ====== ========== =====
```

ITS AT: 5-25

*RELATED SEQUENCES AVAILABLE WITH SEQLINK**
C STN Files: GENBANK

3 ANSWER 4 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
N 569543-39-1 REGISTRY
N **GenBank AR322119** (9CI) (CA INDEX NAME)
QL **71**

EQ 1 tttctcctgg ctcagtttac tagtgccatt tgttcagtgg ttcgcagggc
=== ========== ==========

ITS AT: 8-30

*RELATED SEQUENCES AVAILABLE WITH SEQLINK**
C STN Files: GENBANK

3 ANSWER 5 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
N 556166-87-1 REGISTRY
N DNA, d(G-A-G-G-A-C-A-A-A-C-G-G-G-C-A-A-C-A-T-A-C-C-T-T-G) (9CI) (CA INDEX NAME)
THER NAMES:
N 27: PN: US6589734 SEQID: 27 unclaimed DNA
QL **25**

EQ 1 gaggacaaac gggcaacata ccttg
====== ========== =====

ITS AT: 5-25

RELATED SEQUENCES AVAILABLE WITH SEQLINK
C STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

3 ANSWER 6 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
N 537407-11-7 REGISTRY
N **GenBank BD185236** (9CI) (CA INDEX NAME)
QL **25**

EQ 1 gaggacaaac gggcaacata ccttg
====== ========== =====

ITS AT: 5-25

RELATED SEQUENCES AVAILABLE WITH SEQLINK
C STN Files: GENBANK

3 ANSWER 7 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
N 522099-58-7 REGISTRY
N GenBank BD181510 (9CI) (CA INDEX NAME)
QL **23**

EQ 1 tggctcagtt tactagtgcc att
========== ========== ===

ITS AT: 1-23

RELATED SEQUENCES AVAILABLE WITH SEQLINK
C STN Files: GENBANK

3 ANSWER 8 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
N 522099-57-6 REGISTRY
N GenBank BD181509 (9CI) (CA INDEX NAME)
QL **21**

EQ 1 caaggtatgt tgcccgtttg t
========== ========== =

HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: GENBANK

L3 ANSWER 9 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN [redacted] REGISTRY
CN DNA, d(C-A-A-G-G-T-A-T-G-T-T-G-C-C-C-G-T-T-T-G-T-C-C-T-C) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 9: PN: CN1332239 PAGE: 7 unclaimed sequence
SQL **25**

SEQ 1 caaggtatgt tgcccgtttg tcctc
========== ========== =

HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS

L3 ANSWER 10 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 450663-28-2 REGISTRY
CN **GenBank BD014163** (9CI) (CA INDEX NAME)
SQL **50**

SEQ 1 tagaggacaa acgggcaaca taccttgrta ttaggcatag gacccgtgtc
==== ========== =======

HITS AT: 7-27

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: GENBANK

L3 ANSWER 11 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 392881-68-4 REGISTRY
CN **GenBank E37670** (9CI) (CA INDEX NAME)
SQL **48**

SEQ 1 ctaccaaggt atgttgcccg tttgtcctct acttccagga tcatcaac
====== ========== =====

HITS AT: 5-25

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: GENBANK

L3 ANSWER 12 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 392582-08-0 REGISTRY
CN **GenBank AX353958** (9CI) (CA INDEX NAME)
SQL **23**

SEQ 1 tggctcagtt tactagtgcc att
========== ========== ===

HITS AT: 1-23

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: GENBANK

L3 ANSWER 13 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 392582-07-9 REGISTRY
CN **GenBank AX353957** (9CI) (CA INDEX NAME)
SQL **21**

SEQ 1 caaggtatgt tgcccgtttg t
========== ========== =

HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: GENBANK

L3 ANSWER 14 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 389997-52-8 REGISTRY
CN DNA, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2: PN: EP1174523 SEQID: 2 claimed DNA
SQL **23**

SEQ 1 tggctcagtt tactagtgcc att
========== ========== ===
HITS AT: 1-23

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, USPATFULL

L3 ANSWER 15 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 389997-51-7 REGISTRY
CN DNA, d(C-A-A-G-G-T-A-T-G-T-T-G-C-C-C-G-T-T-T-G-T) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1: PN: EP1174523 SEQID: 1 claimed DNA
SQL **21**

SEQ 1 caaggtatgt tgcccgtttg t
========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, USPATFULL

L3 ANSWER 16 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 389437-66-5 REGISTRY
CN GenBank I65353 (9CI) (CA INDEX NAME)
SQL **46**

SEQ 1 ccgtttctcc tggctcagtt tactagtgcc atttgttcag tggttc
========== ========== ===
HITS AT: 11-33

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: GENBANK

L3 ANSWER 17 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 389232-07-9 REGISTRY
CN **GenBank AR000193** (9CI) (CA INDEX NAME)
SQL **46**

SEQ 1 ctcttggctc agtttactag tgccatttgt tcagtggttc gtaggg
====== ========== =======
HITS AT: 5-27

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: GENBANK

L3 ANSWER 18 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 383741-71-7 REGISTRY
CN **GenBank AX155615** (9CI) (CA INDEX NAME)
SQL **23**

```
SEQ      1 caaggtatgt tgcccgtttg tcc
           ========== ========== =
HITS AT:   1-21

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
LC   STN Files:   GENBANK

L3   ANSWER 19 OF 55  REGISTRY  COPYRIGHT 2003 ACS on STN
RN   383741-70-6  REGISTRY
CN   GenBank AX103462 (9CI)  (CA INDEX NAME)
SQL  23

SEQ      1 caaggtatgt tgcccgtttg tcc
           ========== ========== =
HITS AT:   1-21

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
LC   STN Files:   GENBANK

L3   ANSWER 20 OF 55  REGISTRY  COPYRIGHT 2003 ACS on STN
RN   383741-69-3  REGISTRY
CN   GenBank AX076069 (9CI)  (CA INDEX NAME)
SQL  23

SEQ      1 caaggtatgt tgcccgtttg tcc
           ========== ========== =
HITS AT:   1-21

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
LC   STN Files:   GENBANK

L3   ANSWER 21 OF 55  REGISTRY  COPYRIGHT 2003 ACS on STN
RN   383741-68-2  REGISTRY
CN   GenBank A66937 (9CI)  (CA INDEX NAME)
SQL  23

SEQ      1 caaggtatgt tgcccgtttg tcc
           ========== ========== =
HITS AT:   1-21

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
LC   STN Files:   GENBANK

L3   ANSWER 22 OF 55  REGISTRY  COPYRIGHT 2003 ACS on STN
RN   383673-06-1  REGISTRY
CN   GenBank E61353 (9CI)  (CA INDEX NAME)
SQL  25

SEQ      1 gaggacaaac gggcaacata ccttg
           ====== ========== =====
HITS AT:   5-25

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
LC   STN Files:   GENBANK

L3   ANSWER 23 OF 55  REGISTRY  COPYRIGHT 2003 ACS on STN
RN   383673-05-0  REGISTRY
CN   GenBank AX076116 (9CI)  (CA INDEX NAME)
SQL  25

SEQ      1 caaggtatgt tgcccgtttg tcctc
           ========== ========== =
HITS AT:   1-21
```

```
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
LC   STN Files:   GENBANK

L3   ANSWER 24 OF 55  REGISTRY  COPYRIGHT 2003 ACS on STN
RN   323562-41-0  REGISTRY
CN   GenBank E25769 (9CI)  (CA INDEX NAME)
SQL  24

SEQ      1 aggacaaacg ggcaacatac cttg
           ======= ========== ====

HITS AT:   4-24
NTE  doublestranded
LC   STN Files:   GENBANK

L3   ANSWER 25 OF 55  REGISTRY  COPYRIGHT 2003 ACS on STN
RN   320645-45-2  REGISTRY
CN   92: PN: WO0104358 SEQID: 92 unclaimed sequence (9CI)  (CA INDEX NAME)
SQL  25

SEQ      1 caaggtatgt tgcccgtttg tcctc
           ========== ========== =

HITS AT:   1-21

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
LC   STN Files:   CA, CAPLUS

L3   ANSWER 26 OF 55  REGISTRY  COPYRIGHT 2003 ACS on STN
RN   285572-95-4  REGISTRY
CN   DNA, d(C-T-A-C-C-A-A-G-G-T-A-T-G-T-T-G-C-C-C-G-T-T-T-G-T-C-C-T-C-T-A-C-T-T-
     C-C-A-G-G-A-T-C-A-T-C-A-A-C) (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   5: PN: JP2000201698 SEQID: 5 claimed DNA
SQL  48

SEQ      1 ctaccaaggt atgttgcccg tttgtcctct acttccagga tcatcaac
           ====== ========== =====

HITS AT:   5-25

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
LC   STN Files:   CA, CAPLUS

L3   ANSWER 27 OF 55  REGISTRY  COPYRIGHT 2003 ACS on STN
RN   253555-29-2  REGISTRY
CN   GenBank A91122 (9CI)  (CA INDEX NAME)
SQL  71

SEQ      1 tttctcctgg ctcagtttac tagtgccatt tgttcagtgg ttcgcagggc
             === ========== ==========

HITS AT:   8-30

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
LC   STN Files:   GENBANK

L3   ANSWER 28 OF 55  REGISTRY  COPYRIGHT 2003 ACS on STN
RN   225490-47-1  REGISTRY
CN   GenBank A66908 (9CI)  (CA INDEX NAME)
SQL  23

SEQ      1 caaggtatgt tgcccgtttg tcc
           ========== ========== =

HITS AT:   1-21
```

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: GENBANK

L3 ANSWER 29 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 222647-78-1 REGISTRY
CN GenBank AR017575 (9CI) (CA INDEX NAME)
SQL **25**

SEQ 1 gaggacaaac gggcaacata ccttg
====== ========== =====

HITS AT: 5-25

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: GENBANK

L3 ANSWER 30 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 199301-54-7 REGISTRY
CN DNA, d(C-A-A-G-G-T-A-T-G-T-T-G-C-C-C-G-T-T-T-G-T-C-C) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 27: PN: EP1104811 SEQID: 27 unclaimed DNA
CN 45: PN: WO0104358 SEQID: 45 claimed sequence
CN 8: PN: WO0140279 SEQID: 27 unclaimed DNA
SQL **23**

SEQ 1 caaggtatgt tgcccgtttg tcc
========== ========== =

HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, TOXCENTER

L3 ANSWER 31 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 197832-42-1 REGISTRY
CN GenBank T42218 (9CI) (CA INDEX NAME)
SQL **50**

SEQ 1 tagaggacaa acgggcaaca taccttgrta ttaggcatag gacccgtgtc
==== ========== =======

HITS AT: 7-27

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: GENBANK

L3 ANSWER 32 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 199514-01-2 REGISTRY
CN DNA, d(C-C-G-T-T-T-C-T-C-C-T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G-T-G-G-T-T-C), double-stranded complementary (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, d(C-C-G-T-T-T-C-T-C-C-T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G-T-G-G-T-T-C), double-stranded complementary
CN DNA, d(G-A-A-C-C-A-C-T-G-A-A-C-A-A-A-T-G-G-C-A-C-T-A-G-T-A-A-A-C-T-G-A-G-C-C-A-G-G-A-G-A-A-A-C-G-G), double-stranded complementary (9CI)
SQL **46**

SEQ 1 ccgtttctcc tggctcagtt tactagtgcc atttgttcag tggttc
========== ========== ===

HITS AT: 11-33

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, USPATFULL

L3 ANSWER 33 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 186081-95-8 REGISTRY
CN GenBank I28655 (9CI) (CA INDEX NAME)
SQL **44**

SEQ 1 ctcttggctc agtttactag tgccatttgt tcagtggttc gtag
====== ========== =======

HITS AT: 5-27
LC STN Files: GENBANK

L3 ANSWER 34 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 173588-63-1 REGISTRY
CN DNA, d(G-C-C-T-C-A-G-C-C-C-G-T-T-T-C-T-C-C-T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, d(G-C-C-T-C-A-G-C-C-C-G-T-T-T-C-T-C-C-T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T)
SQL **45**

SEQ 1 gcctcagccc gtttctcctg gctcagttta ctagtgccat ttgtt
== ========== ========== =

HITS AT: 19-41
NTE singlestranded
LC STN Files: CA, CAPLUS

L3 ANSWER 35 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 163516-68-5 REGISTRY
CN DNA, d(C-C-C-T-A-C-G-A-A-C-C-A-C-T-G-A-A-C-A-A-A-T-G-G-C-A-C-T-A-G-T-A-A-A-C-T-G-A-G-C-C-A-A-G-A-G), double-stranded complementary (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, d(C-C-C-T-A-C-G-A-A-C-C-A-C-T-G-A-A-C-A-A-A-T-G-G-C-A-C-T-A-G-T-A-A-A-C-T-G-A-G-C-C-A-A-G-A-G), double-stranded complementary
CN DNA, d(C-T-C-T-T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G-T-G-G-T-T-C-G-T-A-G-G-G), double-stranded complementary (9CI)
SQL **46**

SEQ 1 ctcttggctc agtttactag tgccatttgt tcagtggttc gtaggg
====== ========== =======

HITS AT: 5-27

RELATED SEQUENCES AVAILABLE WITH SEQLINK
LC STN Files: CA, CAPLUS, USPATFULL

L3 ANSWER 36 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 147339-58-0 REGISTRY
CN DNA, d(A-C-A-A-A-C-G-G-G-C-A-A-C-A-T-A-C-C-T-T-G) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, d(A-C-A-A-A-C-G-G-G-C-A-A-C-A-T-A-C-C-T-T-G)
SQL **21**

SEQ 1 acaaacgggc aacatacctt g
========== ========== =

HITS AT: 1-21
NTE singlestranded
LC STN Files: CA, CAPLUS

L3 ANSWER 37 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN 136627-79-7 REGISTRY
CN DNA, d(G-A-G-G-A-C-A-A-A-C-G-G-G-C-A-A-C-A-T-A-C-C-T-T-G) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, d(G-A-G-G-A-C-A-A-A-C-G-G-G-C-A-A-C-A-T-A-C-C-T-T-

G)
QL **25**

EQ 1 gaggacaaac gggcaacata ccttg
====== ========== =====

ITS AT: 5-25

*RELATED SEQUENCES AVAILABLE WITH SEQLINK**
C STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

3 ANSWER 38 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
N [redacted] REGISTRY
N DNA, d(T-T-G-A-T-G-T-T-C-C-T-G-G-A-A-G-T-A-G-A-G-G-A-C-A-A-A-C-G-G-G-C-A-A-C-A-T-A-C-C-T-T-G-G-T-A-G-T-C-C-A-G-A-A-G-A-A-C-C-A) (9CI) (CA INDEX NAME)
THER CA INDEX NAMES:
N Deoxyribonucleic acid, d(T-T-G-A-T-G-T-T-C-C-T-G-G-A-A-G-T-A-G-A-G-G-A-C-A-A-A-C-G-G-G-C-A-A-C-A-T-A-C-C-T-T-G-G-T-A-G-T-C-C-A-G-A-A-G-A-A-C-C-A)
QL **60**

EQ 1 ttgatgttcc tggaagtaga ggacaaacgg gcaacatacc ttggtagtcc
======== ========== ===

ITS AT: 23-43
TE singlestranded
C STN Files: CA, CAPLUS

3 ANSWER 39 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
N [redacted] REGISTRY
N DNA, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 5'-[hydrogen [2-[[1-[2-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)phenyl]-2,5-dioxo-3-pyrrolidinyl]thio]ethyl]phosphoramidate] (9CI) (CA INDEX NAME)
THER CA INDEX NAMES:
N Deoxyribonucleic acid, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 5'-[hydrogen [2-[[1-[2-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)phenyl]-2,5-dioxo-3-pyrrolidinyl]thio]ethyl]phosphoramidate]
QL **30**

EQ 1 tggctcagtt tactagtgcc atttgttcag
========== ========== ===

ITS AT: 1-23

RELATED SEQUENCES AVAILABLE WITH SEQLINK
TE

type	------ location ------	description
modified base	t-1	5'-phosphoramidate

C STN Files: CA, CAPLUS

3 ANSWER 40 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
N [redacted] REGISTRY
N DNA, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 5'-[hydrogen [2-[(2-aminoethyl)dithio]ethyl]phosphoramidate] (9CI) (CA INDEX NAME)
THER CA INDEX NAMES:
N Deoxyribonucleic acid, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 5'-[hydrogen [2-[(2-aminoethyl)dithio]ethyl]phosphoramidate]
QL **30**

EQ 1 tggctcagtt tactagtgcc atttgttcag
========== ========== ===

ITS AT: 1-23

*RELATED SEQUENCES AVAILABLE WITH SEQLINK**
TE

type	------ location ------	description
odified base	t-1	5'-phosphoramidate

C STN Files: CA, CAPLUS

3 ANSWER 41 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
N [redacted] REGISTRY
N DNA, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 5'-[hydrogen (2-mercaptoethyl)phosphoramidate] (9CI) (CA INDEX NAME)
THER CA INDEX NAMES:
N Deoxyribonucleic acid, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 5'-[hydrogen (2-mercaptoethyl)phosphoramidate]
QL **30**

EQ 1 tggctcagtt tactagtgcc atttgttcag
========== ========== ===
ITS AT: 1-23

*RELATED SEQUENCES AVAILABLE WITH SEQLINK**
TE

type	------ location ------	description
odified base	t-1	5'-phosphoramidate

C STN Files: CA, CAPLUS

3 ANSWER 42 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
N [redacted] REGISTRY
N DNA, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G) (9CI) (CA INDEX NAME)
THER CA INDEX NAMES:
N Deoxyribonucleic acid, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G)
QL **30**

EQ 1 tggctcagtt tactagtgcc atttgttcag
========== ========== ===
ITS AT: 1-23

*RELATED SEQUENCES AVAILABLE WITH SEQLINK**
C STN Files: CA, CAPLUS

3 ANSWER 43 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
N [redacted] REGISTRY
N DNA, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-[hydrogen 2-[[[(2,4-dinitrophenyl)methylene]hydrazino]carbonyl]phosphorohydrazidate] (9CI) (CA INDEX NAME)
THER CA INDEX NAMES:
N Deoxyribonucleic acid, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-[hydrogen 2-[[[(2,4-dinitrophenyl)methylene]hydrazino]carbonyl]phosphorohydrazidate]
QL **30**

EQ 1 tggctcagtt tactagtgcc atttgttcag
========== ========== ===
ITS AT: 1-23

*RELATED SEQUENCES AVAILABLE WITH SEQLINK**
TE

type	------ location ------	description
odified base	g-30	3'-phosphoramidate

LC STN Files: CA, CAPLUS

L3 ANSWER 44 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN [redacted] REGISTRY
CN DNA, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-[hydrogen 2-[6-[[[4-[[(phenylmethyl)amino]carbonyl]phenyl]methylene]hydrazino]-1,6-dioxohexyl]phosphorohydrazidate] (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-[hydrogen 2-[6-[[[4-[[(phenylmethyl)amino]carbonyl]phenyl]methylene]hydrazino]-1,6-dioxohexyl]phosphorohydrazidate]
SQL 30

SEQ 1 tggctcagtt tactagtgcc atttgttcag
========== ========== ===
HITS AT: 1-23

RELATED SEQUENCES AVAILABLE WITH SEQLINK
NTE

type	------ location ------	description
odified base	g-30	3'-phosphoramidate

LC STN Files: CA, CAPLUS

L3 ANSWER 45 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN [redacted] REGISTRY
CN DNA, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-[hydrogen 2-[[[[4-[[(phenylmethyl)amino]carbonyl]phenyl]methylene]hydrazino]carbonyl]phosphorohydrazidate] (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-[hydrogen 2-[[[[4-[[(phenylmethyl)amino]carbonyl]phenyl]methylene]hydrazino]carbonyl]phosphorohydrazidate]
SQL 30

SEQ 1 tggctcagtt tactagtgcc atttgttcag
========== ========== ===
HITS AT: 1-23

RELATED SEQUENCES AVAILABLE WITH SEQLINK
NTE

type	------ location ------	description
odified base	g-30	3'-phosphoramidate

LC STN Files: CA, CAPLUS

L3 ANSWER 46 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN [redacted] REGISTRY
CN DNA, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-[hydrogen [[4-[[(phenylmethyl)amino]carbonyl]phenyl]methylene]phosphorohydrazidate] (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:

CN Deoxyribonucleic acid, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-[hydrogen [[4-[[(phenylmethyl)amino]carbonyl]phenyl]methylene]phosphorohydrazidate]
SQL 30

SEQ 1 tggctcagtt tactagtgcc atttgttcag
========== ========== ===
HITS AT: 1-23

RELATED SEQUENCES AVAILABLE WITH SEQLINK
NTE

type	------ location ------	description
modified base	g-30	3'-phosphoramidate

LC STN Files: CA, CAPLUS

L3 ANSWER 47 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN [redacted] REGISTRY
CN DNA, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-[hydrogen 2-[6-[[(2,4-dinitrophenyl)methylene]hydrazino]-1,6-dioxohexyl]phosphorohydrazidate] (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-[hydrogen 2-[6-[[(2,4-dinitrophenyl)methylene]hydrazino]-1,6-dioxohexyl]phosphorohydrazidate]
SQL 30

SEQ 1 tggctcagtt tactagtgcc atttgttcag
========== ========== ===
HITS AT: 1-23

RELATED SEQUENCES AVAILABLE WITH SEQLINK
NTE

type	------ location ------	description
modified base	g-30	3'-phosphoramidate

LC STN Files: CA, CAPLUS

L3 ANSWER 48 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN [redacted] REGISTRY
CN DNA, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-[hydrogen [(2,4-dinitrophenyl)methylene]phosphorohydrazidate] (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-[hydrogen [(2,4-dinitrophenyl)methylene]phosphorohydrazidate]
SQL 30

SEQ 1 tggctcagtt tactagtgcc atttgttcag
========== ========== ===
HITS AT: 1-23

RELATED SEQUENCES AVAILABLE WITH SEQLINK
NTE

type	------ location ------	description
modified base	g-30	3'-phosphoramidate

LC STN Files: CA, CAPLUS

L3 ANSWER 49 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN [redacted] REGISTRY
CN DNA, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-[hydrogen 2-(6-hydrazino-1,6-dioxohexyl)phosphorohydrazidate] (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-[hydrogen 2-(6-hydrazino-1,6-dioxohexyl)phosphorohydrazidate]
SQL **30**

SEQ 1 tggctcagtt tactagtgcc atttgttcag
========== ========== ===
HITS AT: 1-23

RELATED SEQUENCES AVAILABLE WITH SEQLINK
NTE

type	------ location ------	description
modified base	g-30	3'-phosphoramidate

LC STN Files: CA, CAPLUS

L3 ANSWER 50 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN [redacted] REGISTRY
CN DNA, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-(hydrogen 1H-imidazol-1-ylphosphonate) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-(hydrogen 1H-imidazol-1-ylphosphonate)
SQL **30**

SEQ 1 tggctcagtt tactagtgcc atttgttcag
========== ========== ===
HITS AT: 1-23

RELATED SEQUENCES AVAILABLE WITH SEQLINK
NTE

type	------ location ------	description
modified base	g-30	3'-phosphoramidate

LC STN Files: CA, CAPLUS

L3 ANSWER 51 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN [redacted] REGISTRY
CN DNA, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-[hydrogen 2-(hydrazinocarbonyl)phosphorohydrazidate] (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-[hydrogen 2-(hydrazinocarbonyl)phosphorohydrazidate]
SQL **30**

SEQ 1 tggctcagtt tactagtgcc atttgttcag
========== ========== ===
HITS AT: 1-23

RELATED SEQUENCES AVAILABLE WITH SEQLINK
NTE

type	------ location ------	description
modified base	g-30	3'-phosphoramidate

LC STN Files: CA, CAPLUS

L3 ANSWER 52 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN [redacted] REGISTRY
CN DNA, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-(hydrogen phosphorohydrazidate) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-(hydrogen phosphorohydrazidate)
SQL **30**

SEQ 1 tggctcagtt tactagtgcc atttgttcag
========== ========== ===
HITS AT: 1-23

RELATED SEQUENCES AVAILABLE WITH SEQLINK
NTE

type	------ location ------	description
modified base	g-30	3'-phosphoramidate

LC STN Files: CA, CAPLUS

L3 ANSWER 53 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN [redacted] REGISTRY
CN DNA, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-(dihydrogen phosphate) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, d(T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C-A-G), 3'-(dihydrogen phosphate)
SQL **30**

SEQ 1 tggctcagtt tactagtgcc atttgttcag
========== ========== ===
HITS AT: 1-23

RELATED SEQUENCES AVAILABLE WITH SEQLINK
NTE

type	------ location ------	description
modified base	g-30	3'-phosphate

LC STN Files: CA, CAPLUS

L3 ANSWER 54 OF 55 REGISTRY COPYRIGHT 2003 ACS on STN
RN [redacted] REGISTRY
CN DNA, d(G-C-C-T-C-A-G-T-C-C-G-T-T-T-C-T-C-T-T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Deoxyribonucleic acid, d(G-C-C-T-C-A-G-T-C-C-G-T-T-T-C-T-C-T-T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C)
SQL **46**

SEQ 1 gcctcagtcc gtttctcttg gctcagttta ctagtgccat ttgttc

```
                    == ========== ========== =
HITS AT:   19-41
NTE  singlestranded
LC   STN Files:   CA, CAPLUS

L3   ANSWER 55 OF 55  REGISTRY  COPYRIGHT 2003 ACS on STN
RN   [redacted] REGISTRY
CN   DNA, d(G-G-C-C-T-C-A-G-T-C-C-G-T-T-T-C-T-C-T-T-G-G-C-T-C-A-G-T-T-T-A-C-T-A-
     G-T-G-C-C-A-T-T-T-G-T-T-C) (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Deoxyribonucleic acid, d(G-G-C-C-T-C-A-G-T-C-C-G-T-T-T-C-T-C-T-T-G-G-C-T-C-
     A-G-T-T-T-A-C-T-A-G-T-G-C-C-A-T-T-T-G-T-T-C)
SQL  47

SEQ      1 ggcctcagtc cgtttctctt ggctcagttt actagtgcca tttgttc
                           = ========== ========== ==
HITS AT:   20-42

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
LC   STN Files:   CA, CAPLUS


=> fil capl toxcenter uspatfull; s l3
[redacted] ENTERED AT 11:08:19 ON 22 DEC 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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[redacted] ENTERED AT 11:08:19 ON 22 DEC 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)


[redacted] 43 L3

=> dup rem l4
PROCESSING COMPLETED FOR L4
[redacted] 39 DUP REM L4 (4 DUPLICATES REMOVED)
               ANSWERS '1-21' FROM FILE CAPLUS
               ANSWERS '22-39' FROM FILE USPATFULL

=> d bib ab hitrn 1-39; fil hom

L5   ANSWER 1 OF 39  CAPLUS  COPYRIGHT 2003 ACS on STN DUPLICATE 1
ACCESSION NUMBER:         2003:523996  CAPLUS
DOCUMENT NUMBER:          139:80157
TITLE:                    Methods for synthesizing multiple copies of target
                          autocatalytic nucleic acids and uses for detection of
                          HIV
INVENTOR(S):              Kacian, Daniel L.; Fultz, Timothy J.; Mcdonough,
                          Sherrol H.
PATENT ASSIGNEE(S):       Gen-Probe Incorporated, USA
SOURCE:                   U.S., 62 pp., Cont.-in-part of U.S. Ser. No. 469,067.
                          CODEN: USXXAM
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   6
PATENT INFORMATION:

     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
     ---------------   ----  --------      ---------------  --------
```

US 6589734	B1	20030708	US 1998-168947	19981008
AU 9061663	A1	19910222	AU 1990-61663	19900710
AU 650622	B2	19940630		
JP 04500759	T2	19920213	JP 1990-511518	19900710
JP 3241717	B2	20011225		
US 5480784	A	19960102	US 1990-550837	19900710
JP 11046778	A2	19990223	JP 1998-5607	19900710
JP 3445131	B2	20030908		
JP 2000350592	A2	20001219	JP 2000-143544	19900710
JP 3350511	B2	20021125		
US 5824518	A	19981020	US 1995-469067	19950606
US 2003152916	A1	20030814	US 2002-244490	20020916

PRIORITY APPLN. INFO.:

US 1989-379501	B2	19890711
US 1990-550837	A1	19900710
US 1995-469067	A2	19950606
JP 1990-511518	A3	19900710
JP 1998-5607	A3	19900710
WO 1990-US3907	A	19900710
US 1998-168947	A1	19981008

AB The present invention is directed to novel methods of synthesizing multiple copies of a target nucleic acid sequence which are autocatalytic for use in amplifying and detecting HIV nucleic acid in a sample. The present invention involves cooperative action of a DNA polymerase (such as a reverse transcriptase) and a DNA-dependent RNA Polymerase (transcriptase) with an enzymic hybrid-sepn. step to produce products that may themselves be used to produce addnl. product, thus resulting in an autocatalytic reaction without requiring manipulation of reaction conditions such as thermal cycling. The methods of the present invention may be used as a component of assays to detect and/or quantitate specific nucleic acid target sequences in clin., environmental, forensic, and similar samples or to produce large nos. of copies of DNA and/or RNA of specific target sequence for a variety of uses. These methods may also be used to produce multiple DNA copies of a DNA target sequence for cloning or to generate probes or to produce RNA and DNA copies for sequencing.

IT 556166-87-4
RL: PRP (Properties)
(unclaimed nucleotide sequence; methods for synthesizing multiple copies of target autocatalytic nucleic acids and uses for detection of HIV)

REFERENCE COUNT: 135 THERE ARE 135 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 1997:718044 CAPLUS
DOCUMENT NUMBER: 128:19356
TITLE: Line probe assay [LiPA test strip] for genotyping and detecting HBV in blood serum
INVENTOR(S): Stuyver, Lieven; Rossau, Rudi; Maertens, Geert
PATENT ASSIGNEE(S): Innogenetics N.V., Belg.; Stuyver, Lieven; Rossau, Rudi; Maertens, Geert
SOURCE: PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9740193	A2	19971030	WO 1997-EP2002	19970421
WO 9740193	A3	19980507		

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,

DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

ZA 9703367	A	19971118	ZA 1997-3367	19970418
AU 9727662	A1	19971112	AU 1997-27662	19970421
EP 914472	A2	19990512	EP 1997-921677	19970421

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRIORITY APPLN. INFO.: EP 1996-870053 A 19960419
WO 1997-EP2002 W 19970421

AB A method for detection and/or genetic anal. of one or more hepatitis B virus in a biol. sample is described. It relates hybridizing the nucleic acids of the sample with a combination of at least two nucleotide probes targeting mutant sequence chosen from the HBV RT pol gene region and/or the HBV preCore region and/or to mutant HBsAg region HBV genotype-specific target sequence. The probes are assocd. with a solid support and are capable of hybridizing to the polynucleic acids of the sample under the same hybridization and wash conditions. The HBV genotype and/or mutants present in said sample is inferred from the differential hybridization signal(s) obtained. Sets of nucleotide probes and primers useful for typing and/or detecting HBV using assay kits are described.

IT [redacted]
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(nucleotide sequence of HBPr75; line Probe Assay [LiPA test strip] for genotyping and detecting HBV in blood serum)

L5 ANSWER 3 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 1991:576729 CAPLUS
DOCUMENT NUMBER: 115:176729
TITLE: Nucleic acid sequence autocatalytic amplification methods
INVENTOR(S): Kacian, Daniel Louis; Fultz, Timothy J.
PATENT ASSIGNEE(S): Gen-Probe, Inc., USA
SOURCE: Eur. Pat. Appl., 74 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 408295	A2	19910116	EP 1990-307503	19900710
EP 408295	A3	19910828		
EP 408295	B1	19960828		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

WO 9101384	A1	19910207	WO 1990-US3907	19900710

W: AU, FI, JP, KR, NO

AU 9061663	A1	19910222	AU 1990-61663	19900710
AU 650622	B2	19940630		
JP 04500759	T2	19920213	JP 1990-511518	19900710
JP 3241717	B2	20011225		
EP 731174	A2	19960911	EP 1996-101620	19900710
EP 731174	A3	19980325		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

EP 731175	A2	19960911	EP 1996-101621	19900710

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

AT 141956	E	19960915	AT 1990-307503	19900710
ES 2091225	T3	19961101	ES 1990-307503	19900710
JP 11046778	A2	19990223	JP 1998-5607	19900710
JP 3445131	B2	20030908		
JP 2000350592	A2	20001219	JP 2000-143544	19900710
JP 3350511	B2	20021125		
CA 2020958	AA	19910112	CA 1990-2020958	19900711
AU 9474156	A1	19941124	AU 1994-74156	19940922
AU 677418	B2	19970424		

PRIORITY APPLN. INFO.:

US 1989-379501	A	19890711
EP 1990-307503	A3	19900710
JP 1990-511518	A3	19900710
JP 1998-5607	A3	19900710
WO 1990-US3907	A	19900710

AB Methods of synthesizing multiple copies of a target nucleic acid sequence autocatalytically under conditions of substantially const. temp., ionic strength, and pH are provided in which multiple RNA copies of the target sequence autocatalytically generate addnl. copies. These methods are useful for generating copies of a target sequence for clin., forensic, etc. assays, for generating probes, etc. (no data). Primer sets directed to 2 regions of the hepatitis B virus (HBV) genome were used to amplify target sequences from HBV-pos. blood plasma dild. in neg. serum. Ten .mu.L of serum were added to an equal vol. of 0.1N KOH and covered with a layer of oil to prevent evapn. The samples were heated to 95.degree., then cooled to room temp. Buffer, primers, nucleotides, deoxynucleotides, avian myeloblastosis virus or Moloney murine leukemia virus reverse transcriptase, etc. were added and the samples were heated at 37.degree. for 12 min, heated to 95.degree., and then cooled. Reverse transcriptase 13 units and T7 RNA polymerase 100 units were added and the reaction mixts. were incubated for 3 h at 37.degree.. Ten .mu.L of amplification reaction soln. were tested by hybridization assay using chemiluminescent-labeled probes. The amplification potential of each set of primers was influenced by the reverse transcriptase present during amplification.

IT 136627-79-7

RL: PRP (Properties)
(as primer for amplification of target sequence of hepatitis B virus genome)

L5 ANSWER 4 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:	2002:69457 CAPLUS
DOCUMENT NUMBER:	136:113777
TITLE:	Detection of hepatitis B virus by PCR amplification of the surface antigen gene
INVENTOR(S):	Chen, Wei Ning; Oon, Chong Jin
PATENT ASSIGNEE(S):	Government of Republic of Singapore, Singapore
SOURCE:	Eur. Pat. Appl., 23 pp. CODEN: EPXXDW
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1174523	A2	20020123	EP 2001-116929	20010711
EP 1174523	A3	20030618		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
SG 90149	A1	20020723	SG 2000-4041	20000718
US 2003165817	A1	20030904	US 2001-870358	20010530
BR 2001002408	A	20020305	BR 2001-2408	20010618
JP 2002330780	A2	20021119	JP 2001-213219	20010713

CN 1333378	A	20020130	CN 2001-122929	20010718
US 2003017450	A1	20030123	US 2002-210740	20020731
US 2003077578	A1	20030424	US 2002-210544	20020731
US 2003077579	A1	20030424	US 2002-210733	20020731

PRIORITY APPLN. INFO.: SG 2000-4041 A 20000718
US 2001-870358 A3 20010530

AB The present invention relates generally to a nucleic acid-based assay to detect the presence of a viral pathogen and, in particular, hepatitis B virus. More particularly, the present invention provides a single-step PCR assay to detect the hepatitis B virus surface antigen gene. The assay of the present invention is readily adaptable for automation and permits the rapid through-put of samples to be tested. The present invention further provides agents useful for performing a nucleic acid-based detection assay for hepatitis B virus and a kit comprising said agents. The method is insensitive to mutation in the surface antigen gene that can lead to failure of immunoassays. Genes for variants of the surface antigen that are not detected by immunoassays may be cloned for further characterization and diagnostic or therapeutic use (no data).

IT [redacted]
RL: ARG (Analytical reagent use); DGN (Diagnostic use); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(nucleotide sequence, primer for detection of hepatitis B virus surface antigen gene; detection of hepatitis B virus by PCR amplification of surface antigen gene)

L5 ANSWER 5 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:791371 CAPLUS
DOCUMENT NUMBER: 137:275022
TITLE: Preparation of hepatitis B virus chimeric full-length P gene proteins by swapping functional domains between viral mutant isolates
INVENTOR(S): Wen, Yumei; Liu, Xu; Yuan, Zhenghong
PATENT ASSIGNEE(S): Fudan Univ., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 15 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1332239	A	20020123	CN 2001-105685	20010315
WO 2002083881	A1	20021024	WO 2002-CN142	20020311

W: JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR

PRIORITY APPLN. INFO.: CN 2001-105685 A 20010315

AB Methods for constructing recombinant vectors for prepg. hepatitis B virus (HBV) chimeric P gene proteins useful for functional study and therapeutic application are provided. The chimeric HBV P genes contains the sequence of nt 600-691 and swapped functional domain coding regions between HBV natural strain and mutant isolates, preferably at nt 617, 652, and 682. Their expression vectors are constructed by restriction digestion or PCR amplification with primers for specific replacement. Two naturally occurring HBV isolates (56 - much more efficiently replicated, and 2-18 - less efficiently replicated) with 98.7% nucleic acid sequence homol. but different replication efficiencies are selected from infected chinese patients. To explore the structural basis for the difference in replication efficiency between these two isolates, chimeric proteins are prepd. by functional domain substitution. The complete polymerase (P) gene and its gene segments coding for the terminal protein (TP), spacer (SP), reverse transcriptase (RT), and RNase H in 2-18 are sep. replaced

with their counterparts from 56 to construct full-length chimeric genomes. Cell transfection anal. reveals that substitution of the complete P gene of 2-18 with the P gene from 56 slightly enhanced viral replication. The only chimeric genome that regained the high replication efficiency of the original 56 isolate is the one with substitution of the RT gene of 2-18 with that from 56. Within the RT region, amino acid differences between isolates 2-18 and 56 were located at positions 617 (methionine vs. leucine), 652 (serine vs. proline), and 682 (valine vs. leucine). Point mutation identified amino acid 652 as being responsible for the difference in replication efficiency. Homologous modeling studies of the HBV RT domain suggest that the mutation of residue 652 from proline to serine might affect the conformation of HBV RT which interacts with the template-primer, leading to impaired polymerase activity. These chimeric proteins may be used to prep. diagnostic reagent for HBV and anti-HBV drugs.

IT 464974-93-4

RL: PRP (Properties)
(unclaimed sequence; prepn. of hepatitis B virus chimeric full-length P gene proteins by swapping functional domains between viral mutant isolates)

L5 ANSWER 6 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:416987 CAPLUS
DOCUMENT NUMBER: 135:31180
TITLE: Identification of a new human hepatitis B virus genotype (HBV-G) and its phylogenetic relatedness, and prophylactic, therapeutic and diagnostic use thereof
INVENTOR(S): Stuyver, Lieven; Van Geyt, Caroline; De Gendt, Sija
PATENT ASSIGNEE(S): Innogenetics N.V., Belg.
SOURCE: PCT Int. Appl., 94 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001040279	A2	20010607	WO 2000-EP11526	20001120
WO 2001040279	A3	20020110		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1104811	A1	20010606	EP 1999-870252	19991203
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
EP 1234040	A2	20020828	EP 2000-987273	20001120
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003515327	T2	20030507	JP 2001-541034	20001120

PRIORITY APPLN. INFO.:
EP 1999-870252 A 19991203
US 1999-169287P P 19991207
WO 2000-EP11526 W 20001120

AB The genome sequence of a new human hepatitis B virus genotype, provisionally named genotype G, and encoded protein sequences including (preC/C antigen, preS/S antigen, e antigen, and etc.) is reported. This genotype was found with a high prevalence in patients chronically infected

with HBV and residing in Europe and the USA. The present invention further relates to polypeptides encoded by said nucleic acid sequence and to antibodies recognizing said polypeptides. The present invention also relates to the use of said nucleic acid, polypeptides and antibodies in HBV diagnosis, prophylaxis and therapy. Further provided is a method of detecting hepatitis HBV-G in a sample using LiPA (line probe assay).

IT [redacted]

RL: PRP (Properties)
(unclaimed nucleotide sequence; identification of a new human hepatitis B virus genotype (HBV-G) and its phylogenetic relatedness, and prophylactic, therapeutic and diagnostic use thereof)

L5 ANSWER 7 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:50859 CAPLUS
DOCUMENT NUMBER: 134:126751
TITLE: Detection of mutations in hepatitis B virus RNA-dependent DNA polymerase for diagnosis of anti-hepatitis B drug resistance
INVENTOR(S): Stuyver, Lieven; Maertens, Geert; Van Geyt, Caroline
PATENT ASSIGNEE(S): Innogenetics N.V., Belg.
SOURCE: PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001004358	A2	20010118	WO 2000-EP6306	20000705
WO 2001004358	A3	20010830		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2339422	AA	20010118	CA 2000-2339422	20000705
BR 2000006899	A	20010612	BR 2000-6899	20000705
EP 1144693	A2	20011017	EP 2000-951337	20000705
EP 1144693	A3	20011128		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, IE, SI, LT, LV, FI, RO				
JP 2003505021	T2	20030212	JP 2001-509556	20000705

PRIORITY APPLN. INFO.:
EP 1999-870148 A 19990708
US 1999-143546P P 19990713
WO 2000-EP6306 W 20000705

AB The present invention relates to a method for the monitoring of anti-HBV drug resistance in a patient by genetic detection of at least one of the mutations L528M, M552V/I and/or V/L/M555I in the DNA polymerase of the HBV strains present in a biol. sample of said patient. The method for detection of mutations involves amplification of viral DNA using primers followed by hybridization of the amplified viral DNA fragments to specific DNA probes. The present invention provides new HBV DNA polymerase sequences to be used for the design of new probes allowing a very specific and sensitive detection of anti-HBV drug resistance. The method was applied to monitoring of resistance to the antiviral drugs lamivudine, famciclovir and/or penciclovir. The present invention also provides a diagnostic kit for the monitoring of antiviral drug resistance in a patient.

IT [redacted]
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(hepatitis B virus specific primer; detection of mutations in hepatitis B virus RNA-dependent DNA polymerase)

IT [redacted]
RL: PRP (Properties)
(unclaimed sequence; detection of mutations in hepatitis B virus RNA-dependent DNA polymerase for diagnosis of anti-hepatitis B drug resistance)

L5 ANSWER 8 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:416529 CAPLUS
DOCUMENT NUMBER: 135:31179
TITLE: Identification of a new human hepatitis B virus genotype (HBV-G) and its phylogenetic relatedness, and prophylactic, therapeutic and diagnostic use thereof
INVENTOR(S): Stuyver, Lieven
PATENT ASSIGNEE(S): Innogenetics N.V., Belg.
SOURCE: Eur. Pat. Appl., 121 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1104811	A1	20010606	EP 1999-870252	19991203
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
WO 2001040279	A2	20010607	WO 2000-EP11526	20001120
WO 2001040279	A3	20020110		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1234040	A2	20020828	EP 2000-987273	20001120
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003515327	T2	20030507	JP 2001-541034	20001120

PRIORITY APPLN. INFO.: EP 1999-870252 A 19991203
US 1999-169287P P 19991207
WO 2000-EP11526 W 20001120

AB The genome sequence of a new human hepatitis B virus genotype, provisionally named genotype G, and encoded protein sequences including (preC/C antigen, preS/S antigen, e antigen, and etc.) is reported. This genotype was found with a high prevalence in patients chronically infected with HBV and residing in Europe and the USA. The present invention further relates to polypeptides encoded by said nucleic acid sequence and to antibodies recognizing said polypeptides. The present invention also relates to the use of said nucleic acid, polypeptides and antibodies in HBV diagnosis, prophylaxis and therapy. Further provided is a method of detecting hepatitis HBV-G in a sample using LiPA (line probe assay).

IT **199301-54-7**
RL: PRP (Properties)
(unclaimed nucleotide sequence; identification of a new human hepatitis B virus genotype (HBV-G) and its phylogenetic relatedness, and

prophylactic, therapeutic and diagnostic use thereof)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 9 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:501456 CAPLUS
DOCUMENT NUMBER: 133:115886
TITLE: Real-time fluorescence quenching detection of hepatitis B virus gene by a PCR-based method
INVENTOR(S): Ohara, Michinori; Kawamata, Osamu
PATENT ASSIGNEE(S): Tokyoto Igaku Kenkyu Kiko, Japan; SRL Inc.
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000201698	A2	20000725	JP 1999-6285	19990113

PRIORITY APPLN. INFO.: JP 1999-6285 19990113
AB Two sets of forward and reverse primers and 2 probes for the real-time detection of hepatitis B virus (HBV) by PCR are provided. The probes are labeled with a reporter fluorescent dye (e.g. fluorescein deriv.) and a quencher fluorescent dye (e.g. rhodamine deriv.). Using forward and reverse primers and a probe labeled with FAM at 5' and TAMRA at 3', HBV gene in samples obtained from Okinawa area patients were detected.
IT [redacted]
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(oligonucleotide probe; real-time fluorescence quenching detection of hepatitis B virus gene by a PCR-based method)

L5 ANSWER 10 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1997:145211 CAPLUS
DOCUMENT NUMBER: 126:140560
TITLE: Method for detecting nucleic acid sequences using competitive amplification
INVENTOR(S): Birkenmeyer, Larry; Mushahwar, Isa K.
PATENT ASSIGNEE(S): Abbott Laboratories, USA
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9640996	A1	19961219	WO 1996-US8429	19960603
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5667974	A	19970916	US 1995-480220	19950607
CA 2223823	AA	19961219	CA 1996-2223823	19960603
EP 832281	A1	19980401	EP 1996-917000	19960603
EP 832281	B1	20020109		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL				
JP 11506613	T2	19990615	JP 1996-501035	19960603
AT 211771	E	20020115	AT 1996-917000	19960603
ES 2171679	T3	20020916	ES 1996-917000	19960603
US 5955598	A	19990921	US 1997-864404	19970528

PRIORITY APPLN. INFO.: US 1995-480220 A 19950607
WO 1996-US8429 W 19960603

AB A method is provided for quant. detecting the amt. of a target nucleic acid sequence which may be present in a test sample. A test sample which may contain a target nucleic acid sequence comprising target sequences X and Y is contacted with 2 primer sets, the first set being specific for target X and the second set being specific for target Y. The test sample also is contacted at the same time with an internal std. sequence IS, which is substantially derived from a combination of the first and second target sequences, and its corresponding oligonucleotide primers. Haptens are assocd. with the oligonucleotide primer sets in such a way that amplified target sequence products X and Y are detected by capture on a solid phase to which anti-hapten capture reagents are attached. A signal ratio of (X + Y)/S is detd. to quantitate the amt. of the target nucleic acid sequence contained in the sample. The technique is applied to the quant. detn. by gap ligase chain reaction (GLCR) of the DNA of hepatitis B virus, and primer sets are provided for (1) map positions 180-225 and 658-703 within the HBV genome, (2) distinguishing the wild-type and mutant codon 145 of the HBV S-gene, and (3) distinguishing the wild-type and mutant codon 28 of the HBV precore antigen gene.

IT [redacted]
RL: ANT (Analyte); ANST (Analytical study)
(hepatitis B virus DNA target map position 658-703; method for detecting nucleic acid sequences using competitive amplification)

L5 ANSWER 11 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:570870 CAPLUS
DOCUMENT NUMBER: 122:308058
TITLE: Nucleotide sequences and process for amplification and detection of hepatitis B virus
INVENTOR(S): Spies, Uwe
PATENT ASSIGNEE(S): Abbott Laboratories, USA
SOURCE: PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9502690	A1	19950126	WO 1994-US7684	19940708
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2167056	AA	19950126	CA 1994-2167056	19940708
AU 9473264	A1	19950213	AU 1994-73264	19940708
JP 09501829	T2	19970225	JP 1994-504627	19940708
EP 785996	A1	19970730	EP 1994-923386	19940708
R: AT, BE, DE, ES, FR, GB, IT, NL, SE				
US 5736334	A	19980407	US 1996-758626	19961127

PRIORITY APPLN. INFO.: US 1993-90755 19930713
US 1993-422018 19930412
WO 1994-US7684 19940708

AB Short nucleotide sequences of hepatitis B virus are useful for detn. of the presence and type of hepatitis B virus present in a test sample. The sequences provided are amplified by various DNA hybridization techniques including a modified polymerase chain reaction or ligase chain reaction. The sequences provided also can be hybridized by std. dot-blot or replica-blot procedures. Methods and kits also are provided for the detection of hepatitis B virus in the test sample and the detn. of the type of hepatitis B virus present in the test sample. Thus, upstream and downstream oligonucleotide hybridization probe pairs were used that were complementary to target sequences 184-226, 231-251, 403-450, 664-711, and

1875-1894 on the hepatitis B virus DNA genome. The 3' end of the upstream probe or the 5' end of the downstream probe are ligation incompetent. Correction of the ligation-incompetent ends is achieved by (1) extension of the 3' end of the upstream probe with nucleotides complementary to the intervening unhybridized portion f the target nucleic acid sequence, or (2) removal of a non-phosphorylated or mismatched base from the terminus of the 5' end of the downstream probe by a target-dependent exonucleolytic agent followed by extension of the corresponding upstream probe with complementary nucleotides. In one embodiment of the process, the DNA in the test sample is hybridized with at least one upstream oligonucleotide probe and at least one downstream probe to the same strand of the target sequence. The 3' end of the upstream probe is cor. in a manner to render the probes ligatable, such that the ligated product is capable of differentiation from the unligated probe. Detecting the extent to which ligated product is formed is thus a measure of the presence or amt. of hepatitis B virus DNA in the sample. Gap-fill format or exo-format procedures are described for the ligase chain reactions, as is a "short" PCR method, for ligation of the probes.

IT [redacted]
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(target DNA sequence; nucleotide sequences and process for amplification and detection of hepatitis B virus)

L5 ANSWER 12 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1996:67959 CAPLUS
DOCUMENT NUMBER: 124:166449
TITLE: Clinical significance of the polymerase chain reaction assay in chronic hepatitis B virus carriers
AUTHOR(S): Gerken, G.; Protzer, U.; Goergen, B.; Bueschenfelde, K. -H. Meyer zum
CORPORATE SOURCE: I. Med. Klinik und Poliklinik, Johannes Gutenberg Universitat, Mainz, 55101, Germany
SOURCE: PCR: Protocols for Diagnosis of Human and Animal Virus Diseases (1995), 71-83. Editor(s): Becker, Yechiel; Darai, Gholamreza. Springer: Berlin, Germany. CODEN: 62DKAX
DOCUMENT TYPE: Conference
LANGUAGE: English
AB Polymerase chain reaction (PCR) provides an extremely sensitive, direct and rapid assay for the identification of viral genomes. In hepatitis B virus (HBV) infection it has been established as an addnl. diagnostic tool to identify possibly infective individuals, to monitor patients with chronic hepatitis B on interferon treatment and to identify and follow up patients with liver failure due to HBV infection undergoing liver transplantation. Moreover, PCR based assays - such as mutation specific PCR and direct solid phase sequencing - allow an anal. of the viral genome on a broader clin. base. This lead to the characterization of new HBV variants in serum, liver tissue and mononuclear blood cells. So despite the limitations imposed by contamination problems, PCR may become helpful to better select patients who may benefit from various therapeutical options in HBV infection.

IT [redacted]
RL: ARG (Analytical reagent use); PRP (Properties); ANST (Analytical study); USES (Uses)
(nucleotide sequence for hepatitis B virus probe MD09(S); clin. significance of polymerase chain reaction assay in chronic hepatitis B virus carriers)

L5 ANSWER 13 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1994:184645 CAPLUS
DOCUMENT NUMBER: 120:184645
TITLE: Nucleic acid probes and primers for diagnosis of human

hepatitis B virus
INVENTOR(S): McDonough, Sherrol; Fultz, Timothy
PATENT ASSIGNEE(S): Gen-Probe Inc., USA
SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 569237	A2	19931110	EP 1993-303514	19930506
EP 569237	A3	19940525		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL				
WO 9322460	A1	19931111	WO 1993-US4004	19930428
W: AU, CA, JP, KR				
AU 9343686	A1	19931129	AU 1993-43686	19930428
AU 683414	B2	19971113		
JP 07506254	T2	19950713	JP 1993-519491	19930428

PRIORITY APPLN. INFO.: US 1992-879684 A 19920506
WO 1993-US4004 A 19930428

AB Nucleic acid probes and primers are given for diagnosis with high specificity of human hepatitis B virus. The nucleic acid probes and primers may addnl. contain a RNA polymerase-recognizable nucleotide sequence at the 5'-end for enhanced amplification of the viral genome by PCR.

IT [redacted]
RL: PRP (Properties); BIOL (Biological study)
(nucleotide sequence of, for diagnosis of human hepatitis B virus)

L5 ANSWER 14 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1993:226654 CAPLUS
DOCUMENT NUMBER: 118:226654
TITLE: Detection of mammalian and avian hepadnaviruses by the polymerase chain reaction
AUTHOR(S): Gumerlock, Paul H.; Kraegel, Susan A.; Madewell, Bruce R.
CORPORATE SOURCE: Sch. Med., Univ. California, Davis, CA, 95616, USA
SOURCE: Veterinary Microbiology (1992), 32(3-4), 273-80
CODEN: VMICDQ; ISSN: 0378-1135
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The hepadnavirus family contains a no. of related viruses able to infect a variety of animal species. In the present study, the authors have used the polymerase chain reaction and oligonucleotide primers to a conserved region of the viral replicase gene of hepadnaviruses to identify viral sequences in de novo tissues in three well-characterized hepadnavirus systems: the woodchuck, ground squirrel and Pekin duck. Related hepadnavirus sequences were not detected in liver specimens from tree squirrels putatively infected with the tree squirrel hepatitis virus, or in liver specimens from horses with hepatitis (serum sickness), or from dogs with chronic active hepatitis or hepatocellular carcinoma.

IT [redacted]
RL: USES (Uses)
(probe MD09, for mammalian and avian hepadnavirus detection with PCR)

L5 ANSWER 15 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1993:248590 CAPLUS
DOCUMENT NUMBER: 118:248590
TITLE: Generation of digoxigenin-labeled double-stranded and single-stranded probes using the polymerase chain reaction

Searched by Barb O'Bryen, STIC 308-4291

UTHOR(S): An, Shu F.; Franklin, David; Fleming, Kenneth A.
ORPORATE SOURCE: Nuffield Dep. Pathol. Bacteriol., Univ. Oxford, Oxford, OX3 9DU, UK
OURCE: Molecular and Cellular Probes (1992), 6(3), 193-200
CODEN: MCPRE6; ISSN: 0890-8508
OCUMENT TYPE: Journal
ANGUAGE: English

B As the polymerase chain reaction (PCR) can be used for the generation of vector-free probes, the optimum conditions for incorporation of digoxigenin-11-dUTP into hepatitis B virus (HBV) probes have been investigated. High yields of double-stranded or single-stranded probes can be obtained by utilizing a pair of primers or 1 primer alone. The probes were tested by dot-blot hybridization on HBV plasmid DNA, slot-blot hybridization on total cellular RNA of Alexander cells and Southern blot hybridization on cellular DNA of Alexander cells and HBV plasmid DNA. They were also tested by in situ hybridization (ISH) on HBV-pos. biopsy liver tissue. A ratio of digoxigenin-dUTP:dTTP of 1:3 gave highest sensitivity in DNA hybridization. No loss of amplification efficiency and sensitivity was obsd. when the final concn. of digoxigenin-11-dUTP and dTTP was reduced to 20 .mu.M and 60 .mu.M resp., compared to 200 .mu.M each of dATP, dCTP, dGTP. Several different sizes of double-strand probes were compared by dot-blot hybridization. Longer probes were more sensitive. Strong signals could also be obtained by using a combination of 2 or 3 small probes, which have overlapping sequences. Single-stranded DNA probes had advantages of simplicity of use, high sensitivity, and strand specificity.

IT [redacted]
RL: USES (Uses)
(PCR primer, for generation of digoxigenin-labeled double- and single-stranded hepatitis B virus probes)

L5 ANSWER 16 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1990:528979 CAPLUS
DOCUMENT NUMBER: 113:128979
TITLE: Enzyme-nucleic acid hydrazone and hydrazide conjugates, their preparation, and their use as nucleic acid probes
INVENTOR(S): Ghosh, Soumitra Shankar
PATENT ASSIGNEE(S): Siska Diagnostics, Inc., USA
SOURCE: Eur. Pat. Appl., 30 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 361768	A2	19900404	EP 1989-309532	19890919
EP 361768	A3	19910605		
EP 361768	B1	19951108		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				
CA 1333366	A1	19941206	CA 1989-610032	19890831
EP 670329	A2	19950906	EP 1995-105491	19890919
EP 670329	A3	19951206		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				
AT 130046	E	19951115	AT 1989-309532	19890919
ES 2081848	T3	19960316	ES 1989-309532	19890919
JP 02257897	A2	19901018	JP 1989-250374	19890926
PRIORITY APPLN. INFO.:			US 1988-249766	19880926
			EP 1989-309532	19890919

AB Enzyme-labeled nucleic acid probes are provided in which the nucleic acid and enzyme are covalently joined by a hydrazone or hydrazide linker which

is joined to the nucleic acid of the 5'C of the 5' nucleotide. The probes are prepd. e.g. by reacting a derivatized enzyme having an aldehyde group with a hydrazino-derivatized nucleic acid. In another prepn. method, a hydrazone linker is reduced with cyanoborohydride to convert the hydrazone to a hydrazide without substantially affecting the probe. 4-N'-Benzoamidobenzaldehyde is also prepd. for derivatization of prepd. hydrazino-oligonucleotide derivs. Hybridization assays employing the prepd. conjugates are described. Thus, a 30-mer oligonucleotide, complementary to sequences of segments of the insert coding for a hepatitis B surface antigen in plasmid pTB061B was prepd., purified, 5'-phosphorylated, and reacted with imidazole and 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide; the product was then reacted with carbohydrazide to yield a 5'-hydrazino-derivatized nucleic acid. Sep., alk. phosphatase was derivatized with carboxybenzaldehyde-N-hydroxysuccinimide ester, and the aldehyde group-derivatized enzyme was conjugated with the hydrazino-derivatized oligonucleotide. Activity of enzyme in the conjugate was 80-85% that of free enzyme. The above-prepd. probe was used as a detection probe in a sandwich hybridization assay in which the analyte was M13 phage genome comprising 1 strand of the EcoRI fragment of pTB061B coding a hepatitis B virus surface antigen. The conjugate could detect <109 mols. of target sequence in the assay.

IT 124041-87-9DP, 5'-hydrazino derivs., alk. phosphatase conjugates
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, for hybridization probe for hepatitis B surface antigen nucleic acid sequence)

L5 ANSWER 17 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1990:94918 CAPLUS
DOCUMENT NUMBER: 112:94918
TITLE: Use of maleimide-thiol coupling chemistry for efficient syntheses of oligonucleotide-enzyme conjugate hybridization probes
AUTHOR(S): Ghosh, Soumitra S.; Kao, Philip M.; McCue, Ann W.; Chappelle, Hugh L.
CORPORATE SOURCE: SISKA Diagn., Inc., La Jolla, CA, 92037, USA
SOURCE: Bioconjugate Chemistry (1990), 1(1), 71-6
CODEN: BCCHES; ISSN: 1043-1802
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Two general methods that exploit the reactivity of SH groups toward maleimides are described for the synthesis of oligonucleotide-enzyme conjugates for use as nonradioisotopic hybridization probes. In the 1st approach, 6-maleimidohexanoic acid succinimido ester was used to couple 5'-thiolated oligonucleotide to calf intestine alk. phosphatase to provide a 1:1 conjugate in 80-85% yield. The 2nd strategy employed N,N'-1,2-phenylenedimaleimide to crosslink thiolated horseradish peroxidase or .beta.-galactosidase with a 5'-thiolated oligonucleotide in 58 and 65% yields, resp. The oligonucleotide-alk. phosphatase conjugate can detect 6 amol of target DNA in 4 h, whereas the horseradish peroxidase conjugate was 40-fold lower in its sensitivity of detection by using dye pptn. assays.

IT 124041-93-6P
RL: PREP (Preparation)
(prepn. and coupling to enzymes)

IT 124041-89-0P
RL: PREP (Preparation)
(prepn. and coupling to enzymes or phenylenedimaleimide)

IT 124041-91-4P
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and redn. of)

IT 124041-87-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with cystamine)

L5 ANSWER 18 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1990:154799 CAPLUS
DOCUMENT NUMBER: 112:154799
TITLE: Method of nucleic acid hybridization
INVENTOR(S): Kumano, Masanobu
PATENT ASSIGNEE(S): Nippon DPC Corp., USA
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01055198	A2	19890302	JP 1987-145740	19870611

PRIORITY APPLN. INFO.: JP 1987-145740 19870611

AB A method for nucleic acid hybridization comprises (1) hybridizing a single-stranded (ss) target sequence with a labeled (e.g. radioisotope-labeled) complementary ss-polynucleotide and a trapping ss-polynucleotide (e.g. biotinylated), both having mutually repulsive regions and (2) immobilizing the nucleic acid hybrid onto a solid phase through binding with the trapping polynucleotide with a compd. such as avidin. Detections of DNA of human hepatitis B virus, of cytomegalovirus, and of herpes virus type II from biol. samples were demonstrated using 125I-labeled ss-polynucleotide probes and biotinylated trapping sequences.

IT 136124-22-9D, biotinylated products
RL: ANST (Analytical study)
(synthetic nucleic acid sequence for hepatitis B virus detection)

L5 ANSWER 19 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1989:436183 CAPLUS
DOCUMENT NUMBER: 111:36183
TITLE: Synthesis of 5'-oligonucleotide hydrazide derivatives and their use in preparation of enzyme-nucleic acid hybridization probes
AUTHOR(S): Ghosh, Soumitra S.; Kao, Philip M.; Kwoh, Deborah Y.
CORPORATE SOURCE: SISKA Diagnostics, Inc., La Jolla, CA, 92037, USA
SOURCE: Analytical Biochemistry (1989), 178(1), 43-51
CODEN: ANBCA2; ISSN: 0003-2697
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A hydrazone-based method for conjugating synthetic nucleic acids and reporter mols. for use as nonradioactive hybridization probes is presented. Oligonucleotides complementary to the hepatitis B virus were derivatized at the 5' ends with hydrazine or homobifunctional acyl hydrazides. These derivs. reacted facilely with aldehydes to give hydrazones, which were characterized by UV spectroscopy and HPLC. Coupling of aldehyde-modified alk. phosphatase with carbohydrazide-oligonucleotide derivs. provided a mixt. of 2 enzyme-nucleic acid conjugates in 80-85% yield. The conjugates had a 1:1 and a 2:1 oligonucleotide/enzyme ratio, resp., and were sepd. by ion-exchange chromatog. Both conjugates were able to detect 7 amol of target DNA in 1 h, using a colorimetric assay. In contrast, oligonucleotide-horseradish peroxidase conjugates were 40-fold lower in sensitivity of detection.

IT 121381-30-4P 121381-31-5P 121381-35-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction with aldehyde or conjugation with alk. phosphatase aldehyde deriv. and peroxidase aldehyde deriv.)

IT 121381-32-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(prepn. and reaction with hydrazine or carbohydrazide or adipic dihydrazide)

IT [redacted]
RL: PREP (Preparation)
(prepn. of)

IT [redacted] conjugates with alk. phosphatase or peroxidase
[redacted] conjugates with alk. phosphatase or peroxidase
RL: PREP (Preparation)
(prepn. of, as hybridization probes)

IT [redacted] reaction products with enzymes
RL: PREP (Preparation)
(prepn. of, as nucleic acid hybridization probe)

IT [redacted]
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with imidazole)

L5 ANSWER 20 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1988:625994 CAPLUS
DOCUMENT NUMBER: 109:225994
TITLE: Detection of hepatitis B virus sequences in serum by using in vitro enzymic amplification
AUTHOR(S): Larzul, D.; Guigue, F.; Sninsky, J. J.; Mack, D. H.; Brechot, C.; Guesdon, J. L.
CORPORATE SOURCE: Lab. Sondes Froides, Inst. Pasteur, Paris, 75724, Fr.
SOURCE: Journal of Virological Methods (1988), 20(3), 227-37
CODEN: JVMEDH; ISSN: 0166-0934
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In vitro enzymic amplification was applied to detect hepatitis B virus (HBV) DNA sequences in serum. This technique, known as the polymerase chain reaction (PCR), was used to amplify a 128-base pairs (bp) DNA fragment including a 112-nucleotide-long sequence complementary to a region in the S gene of the HBV genome. Amplified samples were subjected to spot-test hybridization and scintillation counting by using a 32P-labeled oligonucleotide probe. A kinetic study, performed for 4-32 PCR cycles with a viral particle prepn., showed a time-limited exponential accumulation of the specific amplified DNA fragment. Amplification yield after 32 cycles was at least 4 .times. 106, with a detection limit equal to 3 .times. 102 viral particles/mL serum. As the reliability of the PCR technique was greatest for 24 PCR cycles, these conditions were used to develop a quant. test with a detection limit of 4 .times. 104 viral particles/mL serum. Results of this test were perfectly correlated with those obtained from the classical spot test without amplification. Ethidium bromide stained agarose gel and Southern blot anal. confirmed the specific amplification of the 128-bp HBV DNA fragment.

IT [redacted]
RL: ANST (Analytical study)
(as probe, for hepatitis B virus DNA sequence detection in blood serum by in vitro enzymic amplification and hybridization anal.)

L5 ANSWER 21 OF 39 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1988:91387 CAPLUS
DOCUMENT NUMBER: 108:91387
TITLE: Method and kit for detection of viruses by amplification and hybridization
INVENTOR(S): Sninsky, John Joseph; Kwok, Shirley Lee; Mack, David Henry
PATENT ASSIGNEE(S): Cetus Corp., USA
SOURCE: Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 27
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 229701	A2	19870722	EP 1987-300203	19870109
EP 229701	A3	19900307		
EP 229701	B1	19950913		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				
CA 1279244	A1	19910122	CA 1986-525591	19861217
AU 8767109	A1	19870716	AU 1987-67109	19870102
AU 606043	B2	19910131		
DK 8700107	A	19870711	DK 1987-107	19870109
ZA 8700152	A	19880928	ZA 1987-152	19870109
ES 2078214	T3	19951216	ES 1987-300203	19870109
JP 62217161	A2	19870924	JP 1987-2648	19870110
JP 2576980	B2	19970129		
US 5008182	A	19910416	US 1989-394276	19890815
US 5176995	A	19930105	US 1989-394145	19890815
US 5386022	A	19950131	US 1993-92767	19930716
JP 06233700	A2	19940823	JP 1993-336838	19931228
JP 2574640	B2	19970122		
US 5594123	A	19970114	US 1994-287385	19941024

PRIORITY APPLN. INFO.:

US 1986-818127	A	19860110
US 1986-934955	A	19861126
US 1986-935581	A	19861126
US 1985-716975	B2	19850328
US 1985-791308	A3	19851025
US 1986-824044	B2	19860130
US 1986-828144	A2	19860207
US 1989-394276	A1	19890815
US 1991-639103	B1	19910109
US 1992-918907	B1	19920722
US 1993-92767	A1	19930716

AB The presence or absence of a nucleic acid sequence assocd. with .gtoreq.1 related viruses in a sample is detected or monitored by (a) treating the sample, together or sep., with an oligonucleotide primer for each strand of nucleic acid sequence, 4 different nucleoside triphosphates, and an agent for polymn., under hybridizing conditions, such that for each strand an extension product of each primer is synthesized which is substantially complementary to each strand being detected or monitored, such that the extension product synthesized from 1 primer, when it is sepd. from its complement, can serve as a template for synthesis of the extension product of the other primer; (b) treating the sample under denaturing conditions to sep. the primer extension products from their templates; (c) treating the product of step (b) with oligonucleotide primers such that a primer extension product is synthesized using each of the single strands produced in (b) as a template, resulting in amplification of the sequence to be detected; and (d) detg. the sequence e.g. by labeled hybridization probe to the amplified product either free in soln. or after immobilization on a solid support. DNA was extd. from samples and amplified by addn. of synthesized 17-mer primers SK01 and SK02 (selected to provide amplification of 107 bases of nucleotides 900-1006 of human T-cell leukemia virus III [HTLV-III]-isolate BH10), dATP, dCTP, dGTP, TTP in Tris-HCl buffer (pH 7.5) contg. NaCl and MgCl2, treatment at 100.degree. for 10 min, cooling to room temp. for 2 min, treatment with 1 unit of Klenow fragment of Escherichia coli DNA polymerase for 2 min, and heating at 95.degree. for 2 min. The denaturation, primer annealing, and extension with Klenow, 2 min/step, was repeated 19 times. Amplified DNA was heat denatured, hybridized with labeled probe, digested with BstNI, electrophoresed on a 30% polyacrylamide mini-gel, and autoradiographed. Only HTLV-III-contg. samples were pos.; HTLV-I, HTLV-II, and leukemia

patient samples were neg.
IT [redacted]
RL: ANST (Analytical study)
(as hybridization probe in virus detection by nucleic acid amplification and hybridization)

L5 ANSWER 22 OF 39 USPATFULL on STN
ACCESSION NUMBER: 2003:237660 USPATFULL
TITLE: Diagnostic assay
INVENTOR(S): Oon, Chong Jin, Singapore, SINGAPORE
Chen, Wei Ning, Singapore, SINGAPORE

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003165817	A1	20030904
APPLICATION INFO.:	US 2001-870358	A1	20010530 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	SG 2000-4041	20000718

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WILSON SONSINI GOODRICH & ROSATI, 650 PAGE MILL ROAD, PALO ALTO, CA, 943041050
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 1480
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates generally to a nucleic acid-based assay to detect the presence of a viral pathogen and, in particular, hepatitis B virus. More particularly, the present invention provides a single-step amplification assay to detect hepatitis B viral nucleic acid sequences. The assay of the present invention is readily adaptable for automation and permits the rapid through-put of samples to be tested. The present invention further provides agents useful for performing a nucleic acid-based detection assay for hepatitis B virus and a kit comprising said agents.
IT [redacted]
(nucleotide sequence, primer for detection of hepatitis B virus surface antigen gene; detection of hepatitis B virus by PCR amplification of surface antigen gene)

L5 ANSWER 23 OF 39 USPATFULL on STN
ACCESSION NUMBER: 2003:219626 USPATFULL
TITLE: Detection of HIV
INVENTOR(S): Kacian, Daniel L., San Diego, CA, UNITED STATES
Fultz, Timothy J., Pleasant Hill, CA, UNITED STATES
McDonough, Sherrol H., San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003152916	A1	20030814
APPLICATION INFO.:	US 2002-244490	A1	20020916 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1998-168947, filed on 8 Oct 1998, PENDING Continuation-in-part of Ser. No. US 1995-469067, filed on 6 Jun 1995, GRANTED, Pat. No. US 5824518 Continuation of Ser. No. US 1990-550837, filed on 10 Jul 1990, GRANTED, Pat. No. US 5480784 Continuation-in-part of Ser. No. US 1989-379501, filed on 11 Jul 1989, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: GEN PROBE INCORPORATED, 10210 GENETIC CENTER DRIVE, SAN DIEGO, CA, 92121
NUMBER OF CLAIMS: 80
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 26 Drawing Page(s)
LINE COUNT: 2955
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to oligonucleotides for use in amplifying and detecting HIV nucleic acid in a sample.
IT [redacted]
(as primer for amplification of target sequence of hepatitis B virus genome)

L5 ANSWER 24 OF 39 USPATFULL on STN
ACCESSION NUMBER: 2003:112847 USPATFULL
TITLE: Diagnostic assay
INVENTOR(S): Oon, Chong Jin, Singapore, SINGAPORE
Chen, Wei Ning, Singapore, SINGAPORE

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003077579	A1	20030424
APPLICATION INFO.:	US 2002-210733	A1	20020731 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2001-870358, filed on 30 May 2001, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	SG 2000-4041	20000718

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WILSON SONSINI GOODRICH & ROSATI, 650 PAGE MILL ROAD, PALO ALTO, CA, 943041050
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 1477
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates generally to a nucleic acid-based assay to detect the presence of a viral pathogen and, in particular, hepatitis B virus. More particularly, the present invention provides a single-step amplification assay to detect hepatitis B viral nucleic acid sequences. The assay of the present invention is readily adaptable for automation and permits the rapid through-put of samples to be tested. The present invention further provides agents useful for performing a nucleic acid-based detection assay for hepatitis B virus and a kit comprising said agents.
IT [redacted]
(nucleotide sequence, primer for detection of hepatitis B virus surface antigen gene; detection of hepatitis B virus by PCR amplification of surface antigen gene)

L5 ANSWER 25 OF 39 USPATFULL on STN
ACCESSION NUMBER: 2003:112846 USPATFULL
TITLE: Diagnostic assay
INVENTOR(S): Oon, Chong Jin, Singapore, SINGAPORE
Chen, Wei Ning, Singapore, SINGAPORE

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003077578	A1	20030424
APPLICATION INFO.:	US 2002-210544	A1	20020731 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2001-870358, filed on 30 May

2001, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	SG 2000-4041	20000718

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WILSON SONSINI GOODRICH & ROSATI, 650 PAGE MILL ROAD, PALO ALTO, CA, 943041050
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 1478
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates generally to a nucleic acid-based assay to detect the presence of a viral pathogen and, in particular, hepatitis B virus. More particularly, the present invention provides a single-step amplification assay to detect hepatitis B viral nucleic acid sequences. The assay of the present invention is readily adaptable for automation and permits the rapid through-put of samples to be tested. The present invention further provides agents useful for performing a nucleic acid-based detection assay for hepatitis B virus and a kit comprising said agents.
IT 389997-51-7 389997-52-8
(nucleotide sequence, primer for detection of hepatitis B virus surface antigen gene; detection of hepatitis B virus by PCR amplification of surface antigen gene)

L5 ANSWER 26 OF 39 USPATFULL on STN
ACCESSION NUMBER: 2003:23610 USPATFULL
TITLE: Diagnostic assay
INVENTOR(S): Oon, Chong Jin, Singapore, SINGAPORE
Chen, Wei Ning, Singapore, SINGAPORE

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003017450	A1	20030123
APPLICATION INFO.:	US 2002-210740	A1	20020731 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2001-870358, filed on 30 May 2001, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	SG 2000-4041	20000718

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WILSON SONSINI GOODRICH & ROSATI, 650 PAGE MILL ROAD, PALO ALTO, CA, 943041050
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 1476
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates generally to a nucleic acid-based assay to detect the presence of a viral pathogen and, in particular, hepatitis B virus. More particularly, the present invention provides a single-step amplification assay to detect hepatitis B viral nucleic acid sequences. The assay of the present invention is readily adaptable for automation and permits the rapid through-put of samples to be tested. The present invention further provides agents useful for performing a nucleic acid-based detection assay for hepatitis B virus and a kit comprising said agents.
IT 389997-51-7 389997-52-8

(nucleotide sequence, primer for detection of hepatitis B virus surface antigen gene; detection of hepatitis B virus by PCR amplification of surface antigen gene)

L5 ANSWER 27 OF 39 USPATFULL on STN
ACCESSION NUMBER: 2002:120027 USPATFULL
TITLE: Detection of Human Immunodeficiency Virus type 1
INVENTOR(S): McDonough, Sherrol H., San Diego, CA, UNITED STATES
Ryder, Thomas B., Escondido, CA, UNITED STATES
Yang, Yeasing, San Diego, CA, UNITED STATES
PATENT ASSIGNEE(S): Gen-Probe Incorporated, San Diego, CA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002062016	A1	20020523
	US 6649749	B2	20031118
APPLICATION INFO.:	US 2001-766095	A1	20010120 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1998-13406, filed on 26 Jan 1998, GRANTED, Pat. No. US 6252059 Continuation of Ser. No. US 1995-479852, filed on 7 Jun 1995, GRANTED, Pat. No. US 5712385 Continuation of Ser. No. US 1993-40745, filed on 26 Mar 1993, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Douglas C. Murdock, BROBECK, PHLEGER & HARRISON LLP, 12390 El Camino Real, San Diego, CA, 92130
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 85
LINE COUNT: 1133
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Amplification oligonucleotides and hybridization assay probes which distinguish Human Immunodeficiency Virus type 1 from other viruses.
IT [redacted]
(as primer for amplification of target sequence of hepatitis B virus genome)

L5 ANSWER 28 OF 39 USPATFULL on STN
ACCESSION NUMBER: 2001:98079 USPATFULL
TITLE: Detection of human immunodeficiency virus type 1
INVENTOR(S): McDonough, Sherrol H., San Diego, CA, United States
Ryder, Thomas B., Escondido, CA, United States
Yang, Yeasing, San Diego, CA, United States
PATENT ASSIGNEE(S): Gen-Probe Incorporated, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6252059	B1	20010626
APPLICATION INFO.:	US 1998-13406		19980126 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1995-479852, filed on 7 Jun 1995, now patented, Pat. No. US 5712385 Continuation of Ser. No. US 1993-40745, filed on 26 Mar 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Park, Hankyel
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
LINE COUNT: 863
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Amplification oligonucleotides and hybridization assay probes which distinguish Human Immunodeficiency Virus type 1 from other viruses.

T [redacted]
(as primer for amplification of target sequence of hepatitis B virus genome)

L5 ANSWER 29 OF 39 USPATFULL on STN
ACCESSION NUMBER: 1999:113883 USPATFULL
TITLE: Primer compositions and kits for detecting hepatitis B virus
INVENTOR(S): Birkenmeyer, Larry, Chicago, IL, United States
Mushahwar, Isa K., Grayslake, IL, United States
PATENT ASSIGNEE(S): Abbott Laboratories, Abbott Park, IL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5955598		19990921
APPLICATION INFO.:	US 1997-864404		19970528 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-480220, filed on 7 Jun 1995, now patented, Pat. No. US 5667974
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Horlick, Kenneth R.
LEGAL REPRESENTATIVE: Porembski, Priscilla E., Yasger, Paul D.
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 1070
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a method for quantitatively detecting the amount of a target nucleic acid sequence which may be present in a test sample. A test sample which may contain a target nucleic acid sequence comprising target sequences X and Y is contacted with two primer sets, the first set being specific for target X and the second set being specific for target Y. The test sample also is contacted at the same time with an internal standard sequence IS, which is substantially derived from a combination of the first and second target sequences, and its corresponding oligonucleotide primers. Haptens are associated with the oligonucleotide primer sets in such a way that amplified target sequence products X and Y are detected by capture on a solid phase to which anti-hapten capture reagents are attached. A signal ratio of (X+Y)/S is determined to quantitate the amount of the target nucleic acid sequence contained in the sample.
IT [redacted]
(hepatitis B virus DNA target map position 658-703; method for detecting nucleic acid sequences using competitive amplification)

L5 ANSWER 30 OF 39 USPATFULL on STN
ACCESSION NUMBER: 1999:63217 USPATFULL
TITLE: Detecting Mycobacterium tuberculosis by nucleic acid sequence amplification
INVENTOR(S): McAllister, Diane L., San Diego, CA, United States
Hammond, Philip W., San Diego, CA, United States
PATENT ASSIGNEE(S): Gen-Probe Incorporated, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5908744		19990601
APPLICATION INFO.:	US 1995-479105		19950606 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-345861, filed on 28 Nov 1994, now patented, Pat. No. US 5766849 which is a continuation of Ser. No. US 1992-925405, filed on 4 Aug 1992, now abandoned which is a continuation-in-part of

Ser. No. US 1992-855732, filed on 19 Mar 1992, now patented, Pat. No. US 5399491 which is a continuation-in-part of Ser. No. US 1990-550837, filed on 10 Jul 1990, now patented, Pat. No. US 5480784 which is a continuation-in-part of Ser. No. US 1989-379501, filed on 11 Jul 1989, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Horlick, Kenneth R.
ASSISTANT EXAMINER: Tung, Joyce
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 57
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 1425
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method, composition and kit for synthesizing multiple copies of a target nucleic acid sequence autocatalytically under conditions of substantially constant temperature, ionic strength, and pH are provided in which multiple RNA copies of the target sequence autocatalytically generate additional copies using a mixture of blocked and unblocked primers and/or promoter-primers to initiate DNA and RNA synthesis, preferably with reduced non-specific product formation. The invention is useful for generating copies of a nucleic acid target sequence for purposes that include assays to quantitate specific nucleic acid sequences in clinical, environmental, forensic and similar samples, cloning and generating probes.

IT 136627-79-7
(as primer for amplification of target sequence of hepatitis B virus genome)

L5 ANSWER 31 OF 39 USPATFULL on STN
ACCESSION NUMBER: 1999:40200 USPATFULL
TITLE: Kits for nucleic acid sequence amplification methods
INVENTOR(S): Kacian, Daniel Louis, San Diego, CA, United States
Fultz, Timothy J., Vista, CA, United States
PATENT ASSIGNEE(S): Gen-Probe Incorporated, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5888779		19990330
APPLICATION INFO.:	US 1995-461654		19950605 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1990-550837, filed on 10 Jul 1990, now patented, Pat. No. US 5480784 which is a continuation-in-part of Ser. No. US 1989-379501, filed on 11 Jul 1989, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Zitomer, Stephanie W.
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 28 Drawing Figure(s); 26 Drawing Page(s)
LINE COUNT: 2680
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Kits for synthesizing multiple copies of a target nucleic acid sequence autocatalytically under conditions of substantially constant temperature, ionic strength, and pH are provided in which multiple RNA copies of the target sequence autocatalytically generate additional copies. These methods are useful for generating copies of a nucleic acid target sequence for purposes which include assays to quantitate specific nucleic acid sequences in clinical, environmental, forensic and similar

samples, cloning and generating probes.

IT [redacted]
(as primer for amplification of target sequence of hepatitis B virus genome)

L5 ANSWER 32 OF 39 USPATFULL on STN

ACCESSION NUMBER:	1999:1428 USPATFULL
TITLE:	Detection of human immunodeficiency virus type 1
INVENTOR(S):	McDonough, Sherrol H., San Diego, CA, United States Ryder, Thomas B., Escondido, CA, United States Yang, Yeasing, San Diego, CA, United States
PATENT ASSIGNEE(S):	Gen-Probe Incorporated, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5856088		19990105
APPLICATION INFO.:	US 1995-462646		19950605 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-40745, filed on 26 Mar 1993, now abandoned which is a continuation-in-part of Ser. No. US 1989-379501, filed on 11 Jul 1989, now abandoned And Ser. No. US 1990-550837, filed on 10 Jul 1990, now patented, Pat. No. US 5480784

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Zitomer, Stephanie W.
LEGAL REPRESENTATIVE:	Lyon & Lyon LLP
NUMBER OF CLAIMS:	89
EXEMPLARY CLAIM:	1
LINE COUNT:	1748

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Amplification oligonucleotides and hybridization assay probes which distinguish Human Immunodeficiency Virus type from other viruses.

IT [redacted]
(as primer for amplification of target sequence of hepatitis B virus genome)

L5 ANSWER 33 OF 39 USPATFULL on STN

ACCESSION NUMBER:	1998:128110 USPATFULL
TITLE:	Nucleic acid sequence amplification methods
INVENTOR(S):	Kacian, Daniel Louis, San Diego, CA, United States Fultz, Timothy J., Vista, CA, United States
PATENT ASSIGNEE(S):	Gen-Probe Incorporated, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5824518		19981020
APPLICATION INFO.:	US 1995-469067		19950606 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1990-550837, filed on 10 Jul 1990, now patented, Pat. No. US 5480784 which is a continuation-in-part of Ser. No. US 1989-379501, filed on 11 Jul 1989, now abandoned

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Zitomer, Stephanie W.
LEGAL REPRESENTATIVE:	Lyon & Lyon LLP
NUMBER OF CLAIMS:	14
EXEMPLARY CLAIM:	10
NUMBER OF DRAWINGS:	28 Drawing Figure(s); 26 Drawing Page(s)
LINE COUNT:	2687

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods of synthesizing multiple copies of a target nucleic acid

sequence autocatalytically under conditions of substantially constant temperature, ionic strength, and pH are provided in which multiple RNA copies of the target sequence autocatalytically generate additional copies. These methods are useful for generating copies of a nucleic acid target sequence for purposes which include assays to quantitate specific nucleic acid sequences in clinical, environmental, forensic and similar samples, cloning and generating probes.

IT [redacted]
(as primer for amplification of target sequence of hepatitis B virus genome)

L5 ANSWER 34 OF 39 USPATFULL on STN

ACCESSION NUMBER:	1998:82522 USPATFULL		
TITLE:	Nucleic acid amplification oligonucleotides and probes to human hepatitis B virus		
INVENTOR(S):	McDonough, Sherrol H., San Diego, CA, United States Fultz, Timothy J., Martinez, CA, United States		
PATENT ASSIGNEE(S):	Gen-Probe Incorporated, San Diego, CA, United States (U.S. corporation)		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5780219		19980714
APPLICATION INFO.:	US 1995-371583		19950112 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1992-879684, filed on 6 May 1992, now abandoned which is a continuation-in-part of Ser. No. US 1990-550837, filed on 10 Jul 1990, now patented, Pat. No. US 5480784, issued on 2 Jan 1996 which is a continuation-in-part of Ser. No. US 1989-379501, filed on 11 Jul 1989, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Marschel, Ardin H.		
LEGAL REPRESENTATIVE:	Lyon & Lyon LLP		
NUMBER OF CLAIMS:	57		
EXEMPLARY CLAIM:	1		
LINE COUNT:	711		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Amplification oligonucleotides and hybridization assay probes specific for Human Hepatitis B Virus.

IT [redacted]
(as primer for amplification of target sequence of hepatitis B virus genome)

L5 ANSWER 35 OF 39 USPATFULL on STN

ACCESSION NUMBER:	1998:68776 USPATFULL		
TITLE:	Methods of amplifying nucleic acids using promoter-containing primer sequence		
INVENTOR(S):	McDonough, Sherrol H., San Diego, CA, United States Kacian, Daniel L., San Diego, CA, United States Dattagupta, Nanibhushan, San Diego, CA, United States McAllister, Diane L., San Diego, CA, United States Hammond, Philip W., San Diego, CA, United States Ryder, Thomas B., Escondido, CA, United States		
PATENT ASSIGNEE(S):	Gen-Probe Incorporated, San Diego, CA, United States (U.S. corporation)		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5766849		19980616
APPLICATION INFO.:	US 1994-345861		19941128 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1992-925405, filed on 4 Aug 1992, now abandoned And a continuation-in-part of Ser.		

No. US 1990-550837, filed on 10 Jul 1990, now patented, Pat. No. US 5480784 And a continuation-in-part of Ser. No. US 1989-379501, filed on 11 Jul 1989, now abandoned , said Ser. No. US -925405 which is a continuation-in-part of Ser. No. US 1992-855732, filed on 19 Mar 1992, now patented, Pat. No. US 5399491

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Jones, W. Gary
ASSISTANT EXAMINER: Tran, Paul B.
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 53
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 1308
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method, composition and kit for synthesizing multiple copies of a target nucleic acid sequence autocatalytically under conditions of substantially constant temperature, ionic strength, and pH are provided in which multiple RNA copies of the target sequence autocatalytically generate additional copies using a mixture of blocked and unblocked primers and/or promoter-primers to initiate DNA and RNA synthesis, preferably with reduced non-specific product formation. The invention is useful for generating copies of a nucleic acid target sequence for purposes that include assays to quantitate specific nucleic acid sequences in clinical, environmental, forensic and similar samples, cloning and generating probes.

IT [redacted]
(as primer for amplification of target sequence of hepatitis B virus genome)

L5 ANSWER 36 OF 39 USPATFULL on STN
ACCESSION NUMBER: 1998:36545 USPATFULL
TITLE: Nucleotide sequences and process for amplifying and detection of hepatitis B viral DNA
INVENTOR(S): Spies, Uwe, Limburg, Germany, Federal Republic of
PATENT ASSIGNEE(S): Abbott Laboratories, Abbott Park, IL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5736334		19980407
APPLICATION INFO.:	US 1996-758626		19961127 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-422018, filed on 12 Apr 1993, now abandoned which is a continuation of Ser. No. US 1993-90755, filed on 13 Jul 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Elliott, George C.
ASSISTANT EXAMINER: Schwartzman, Robert
LEGAL REPRESENTATIVE: Brainard, Thomas D., Yasger, Paul D.
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 6
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 1697
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Short nucleotide sequences of hepatitis B virus useful for the determination of the presence and type of hepatitis B virus present in a test sample. The sequences provided can be amplified by various DNA hybridization techniques including a modified polymerase chain reaction or ligase chain reaction. The sequences provided also can be hybridized by standard dot- or replica-blot procedures. Methods and kits also are provided for the detection of hepatitis B virus in a test sample and the

determination of the type of hepatitis B virus present in the test sample.

IT [redacted]
(target DNA sequence; nucleotide sequences and process for amplification and detection of hepatitis B virus)

L5 ANSWER 37 OF 39 USPATFULL on STN

ACCESSION NUMBER:	1998:9606 USPATFULL
TITLE:	Detection of human immunodeficiency virus type 1
INVENTOR(S):	McDonough, Sherrol H., San Diego, CA, United States Ryder, Thomas B., Escondido, CA, United States Yang, Yeasing, San Diego, CA, United States
PATENT ASSIGNEE(S):	Gen-Probe Incorporated, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5712385		19980127
APPLICATION INFO.:	US 1995-479852		19950607 (8)

RELATED APPLN. INFO.:	Continuation of Ser. No. US 1993-40745, filed on 26 Mar 1993, now abandoned which is a continuation-in-part of Ser. No. US 1989-379501, filed on 11 Jul 1989, now abandoned And Ser. No. US 1990-550837, filed on 10 Jul 1990, now patented, Pat. No. US 5480784, issued on 2 Jan 1996
DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Zitomer, Stephanie W.
LEGAL REPRESENTATIVE:	Lyon & Lyon LLP
NUMBER OF CLAIMS:	46
EXEMPLARY CLAIM:	1
LINE COUNT:	1559

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Amplification oligonucleotides and hybridization assay probes which distinguish Human Immunodeficiency Virus type 1 from other viruses.

IT [redacted]
(as primer for amplification of target sequence of hepatitis B virus genome)

L5 ANSWER 38 OF 39 USPATFULL on STN

ACCESSION NUMBER:	97:83803 USPATFULL
TITLE:	Method for detecting nucleic acid sequences using competitive amplification
INVENTOR(S):	Birkenmeyer, Larry, Chicago, IL, United States Mushahwar, Isa K., Grayslake, IL, United States
PATENT ASSIGNEE(S):	Abbott Laboratories, Abbott Park, IL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5667974		19970916
APPLICATION INFO.:	US 1995-480220		19950607 (8)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Zitomer, Stephanie W.
ASSISTANT EXAMINER:	Tung, Joyce
LEGAL REPRESENTATIVE:	Porembski, Priscilla E.
NUMBER OF CLAIMS:	8
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT:	999

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a method for quantitatively detecting the

amount of a target nucleic acid sequence which may be present in a test sample. A test sample which may contain a target nucleic acid sequence comprising target sequences X and Y is contacted with two primer sets, the first set being specific for target X and the second set being specific for target Y. The test sample also is contacted at the same time with an internal standard sequence IS, which is substantially derived from a combination of the first and second target sequences, and its corresponding oligonucleotide primers. Haptens are associated with the oligonucleotide primer sets in such a way that amplified target sequence products X and Y are detected by capture on a solid phase to which anti-hapten capture reagents are attached. A signal ratio of (X+Y)/S is determined to quantitate the amount of the target nucleic acid sequence contained in the sample.

IT 186514-01-2
(hepatitis B virus DNA target map position 658-703; method for detecting nucleic acid sequences using competitive amplification)

L5 ANSWER 39 OF 39 USPATFULL on STN

ACCESSION NUMBER:	95:24837 USPATFULL
TITLE:	Nucleic acid sequence amplification methods
INVENTOR(S):	Kacian, Daniel L., San Diego, CA, United States Fultz, Timothy J., Vista, CA, United States
PATENT ASSIGNEE(S):	Gen-Probe Incorporated, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5399491		19950321
APPLICATION INFO.:	US 1992-855732		19920319 (7)

RELATED APPLN. INFO.:	Continuation of Ser. No. US 1990-550837, filed on 10 Jul 1990 which is a continuation-in-part of Ser. No. US 1989-379501, filed on 11 Jul 1989, now abandoned
DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Fleisher, Mindy B.
LEGAL REPRESENTATIVE:	Lyon & Lyon
NUMBER OF CLAIMS:	49
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	28 Drawing Figure(s); 26 Drawing Page(s)
LINE COUNT:	3215

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods of synthesizing multiple copies of a target nucleic acid sequence autocatalytically under conditions of substantially constant temperature, ionic strength, and pH are provided in which multiple RNA copies of the target sequence autocatalytically generate additional copies. These methods are useful for generating copies of a nucleic acid target sequence for purposes which include assays to quantitate specific nucleic acid sequences in clinical, environmental, forensic and similar samples, cloning and generating probes.

IT **136627-79-7**
(as primer for amplification of target sequence of hepatitis B virus genome)

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